

# Piezoelectric Accelerometer

## PV-97

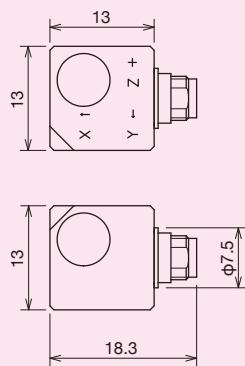
High Temperature Type

3-Axis

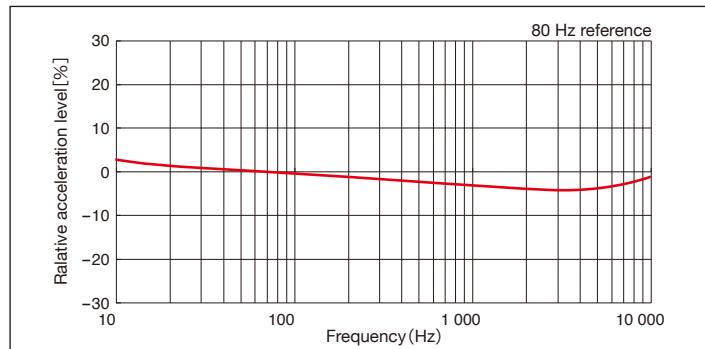


■ Press fit section reinforced by laser machining  
Can be used at temperatures up to 200 °C

■ Dimensions (mm)



■ Typical frequency response of the PV-97



■ Noise Level ACC (Acceleration m/s<sup>2</sup>) (Typical)

Vibration Meter	VM-83	0.1
Vibration Meter Unit	UV-15	0.1
2ch Charge Amplifier	UV-16	0.1

Specifications

Principle	Piezoelectric acceleration detection, plate shear type
Number of components	3 (3-axis orthogonal coordinate system)
Charge sensitivity <sup>※1</sup>	Approx. 0.29 pC/(m/s <sup>2</sup> ) (80 Hz)
Vibration Frequency range <sup>※2</sup>	1 Hz to 10 000 Hz, 1 to 5 000 (X / Y) (±10 %)
Max. transverse sensitivity ratio	5 % or less (30 Hz)
Maximum measurable acceleration	5 000 m/s <sup>2</sup> (peak value)
Capacitance	Approx. 500 pF (1 kHz)
Base distortion sensitivity	0.1 (m/s <sup>2</sup> ) / µstrain or less (using 3 Hz HPF)
Thermal transient response	1.0 (m/s <sup>2</sup> ) / °C or less (using 3 Hz HPF)
Case insulation	Non-insulated
Case material	Titanium alloy
Standard mounting method <sup>※3</sup>	Adhesive mounting
Connection	Small 4-pin connector
Polarity	Positive charge output corresponding to acceleration in direction indicated by arrow on case
Ambient temperature range for operation / °C	-50 °C to +200 °C
Dimensions	Approx. 13 (H) x 13 (W) x 13 (D) mm (excl. connector)
Mass	Approx. 10 g
Cable	3-axis low-noise cable VP-51WL for PV-97

**Note** <sup>※1</sup> Representative value. Actual values are given on calibration sheet supplied with accelerometer.  
<sup>※2</sup> Representative value when mounted on flat surface with standard mounting method (<sup>※3</sup>).

- The piezoelectric element in a piezoelectric accelerometer may be damaged by excessive shock. Take care not to drop the accelerometer, and handle it with care when using the magnetic attachment.



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 **RION CO., LTD.**  
<https://rion-sv.com/>

3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan  
 Tel: +81-42-359-7888 Fax: +81-42-359-7442